DOCUMENT RESUME

ED 355 866 HE 026 303

AUTHOR Paulston, Rolland G.; Liebman, Martin
TITLE Mapping the Space of Ideas in Comparative Education Discourse.
PUB DATE Nov 92
NOTE 29p.
PUB TYPE Viewpoints (Opinion/Position Papers, Essays, etc.) (120)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Cognitive Mapping; Cultural Influences; Higher Education; Intellectual Development; Political Influences; Social Influences; *Social Science Research

ABSTRACT

This essay demonstrates how the creation of cognitive maps by academics, as well as those individuals and social groups who want their "mininarratives" included in social discourses, will move social research away from modernist and positivist failings, and open a dialogue among diverse social players. Cognitive maps are visual imageries depicting in two dimensions the researcher's perceived application, allocation, or appropriation of social space by social groups at a given time and in a given place. These demonstrate the attributes and capacity as well as the development and discernment of cultures and people operating within a social milieu. The cognitive map can provide an effective method for visually demonstrating the sensitivity of postmodern influences for opening social dialogue to those who are disenfranchised by modernist conventions. In addition the map provides the mapper access to understanding and gives all persons the opportunity to enter a dialogue to show where they are in society. The cognitive map reveals the known and perceived social inclusions while leaving space for further inclusions of social ideas. Finally, maps offer comparative researchers an opportunity to situate optimistically the world of ideas in a postmodern panorama, disallowing the promotion of an orthodoxy. Three sample maps are included. (Contains 17 references.) (Author/JB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED355866

MAPPING THE SPACE OF IDEAS IN COMPARATIVE EDUCATION DISCOURSE

Rolland G. Paulston

Martin Liebman

Department of Administrative and Policy Studies

University of Pittsburgh

Pittsburgh, PA 15260

Phone: 412-648-7428
FAX: 412-648-5911

November, 1992

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Rolland G. Paulston

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

BEST COPY AVAILABLE

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

NE 026 303

Abstract

This essay demonstrates how the creation of cognitive maps by academics, as well as those individuals and social groups who want their "mininarratives" included in the social discourse, will move social research away from modernist and positivist failings, and open a dialogue among diverse social players. Cognitive maps demonstrate the attributes and capacity as well as the development and discernment of cultures and people operating within a social milieu. The cognitive map will provide an effective method for visually demonstrating the sensitivity of postmodern influences for opening social dialogue to those who were disenfranchised by modernist conventions.

Rolland Paulston received his doctoral from Teachers College, Columbia University (1966) and is a past president of the Comparative and International Education Society (1976). His studies of social and educational change in Sweden, Peru and Cuba--and in numerous social and ethnic movements, have been reported in a variety of scholarly publications. Now Professor of Administrative and Policy Studies, his current research project uses phenomenographic and critical cartographic approaches to map ideas in educational policy discourse. Recent project publications by Professor Paulston can be found in the AERA Encyclopedia of Education Research (1992) and the Latin American Research Review (27:1992).

Correspondence to Rolland Paulston, School of Education, FQ 5M34, University of Pittsburgh, PA 15260.

Martin Liebman is a doctoral candidate in the Department of Administrative and Policy Studies at the University of Pittsburgh. His dissertation compares modernist and postmodernist ways of seeing space and time in educational policy studies. Correspondence to Martin Liebman, School of Education, Administrative & Policy Studies, FQ 5S40, University of Pittsburgh, PA 15260.

MAPPING THE SPACE OF IDEAS IN COMPARATIVE EDUCATION DISCOURSE

> "The basic idea of phenomenography is that each phenomenon can be experienced or conceptualized in a limited number of qualitatively different ways and it is the task of phenomenography to map these possible understandings." (Marton, 1988, 196)
>
> "I view maps as a kind of language...as reciprocal value-laden images used to mediate different views of the world." (Harley, 1988, 278)

Introduction

How might comparative researchers enhance the presentation of their findings, particularly when their findings focus on the diffusion of heterogeneous orientations? We are concerned with developing in our comparative discourse a visual dialogue as a way of communicating how we see the social changes developing in the world around us, by advocating the use of cognitive maps--visual imageries depicting on the two dimensional surface of screen or paper the researcher's perceived application, allocation, or appropriation of social space by social groups at a given time and in a given place. Cognitive mapping is "a process composed of a series of psychological transformations by which an individual acquires, codes, stores, recalls, and decodes information about the relative locations and attributes of phenomena in...[the] everyday geographical environment" (Downs and Stea, 1973, 9). This process consists of "aggregate information...acquisition, amalgamation, and storage"

producing a product depicting space peculiar to a point in time. Cognitive maps present immediate and practical answers to the location of persons and objects as well as relationships between combinations of persons and objects. The interpretation and comprehension of both theoretical constructs and social events can be facilitated and enhanced by cognitive images.

We neither believe nor intend to convey that cognitive maps can replace spoken or written discourse; the research article will remain the primary method for reporting research findings. While the academic may originate maps, the reader who is a member of a particular claimant group can view the map as an opportunity to strengthen his claim by citing or rebutting original mapping efforts as well as the knowledge and information the map offers. "We are in for an extended period of learning to work together as a diverse yet interactive global community of scholars. This situation suggests a continuing need for goodwill, translation, and cognitive maps to help us see a shifting theoretical landscape" (Paulston, 1992). There is no doubt, however, efforts to work together will extend beyond academia, embracing those groups whose activity and social space are being mapped. If we are to develop rules for accuracy and inclusion in a critical, postmodern, social cartography, we should attempt to envelop not only the space being mapped, but the perceptions of the owners of that space.

It was Peter Hackett who concluded "that without metaphor, allegory and a thick description of the world around us there is no basis for comparative study or analysis" (Hackett, 1988, 389). We concur in this observation for it counsels anyone in comparative studies to the possibilities of exclusions. In what we as researchers seek, as well as what we report, should be found the "basic source of unity in our experience" (Hackett, 391)

In education, as well as many other academic fields, change has often raised more questions than it has answered, raised more fears than it has calmed, raised more arguments than it has settled. Neither quietly nor unnoticed, modern voyages of discovery have the attention of many who express their ideas about how the exploration should proceed. What rationales for new discourse methods have comparative researchers recently introduced? How does the cognitive map fulfill the needs addressed by these rationales?

Invitations to a Postmodern Reflection

Presented in this essay are the concerns of three academic practitioners, one in comparative education and two in geographic cartography, who have called on colleagues in these areas to move their respective academic fields toward a postmodernist integration, to become more explicative, comparative, and open to heterogeneous orientations in their postmodern academic discourse. Postmodernism is not promoted, rather the possibilities for comparative fields to expand

their knowledge bases through appropriate, thoughtful, and skillful development and application of cognitive maps.

In presenting an argument that postmodernism "should be a central concept in our comparative education discourse," Val Rust (1990, 610) calls for the application of postmodernist theories to strengthen emerging representations of reality. Rust notes that Foucault believes there must be a move beyond determinism and universals while Lyotard discerns in the postmodern a distrust of metanarratives. Noted also is Richard Rorty's observation that metanarratives are "the theoretical crust of convention that we all carry and tend to universalize" (Rust, 616). Postmodernism deals with changing these universal metanarratives of social valuation of the modernist era, metanarratives seen as totalizing, standardizing, and predominating.

Rust finds postmodern discussions and criticisms address the history of modernist society and culture as it was ingrained and justified by a world view obsessed with focusing on time and history. These measures of the modernist world were not separate cognitive structures, but links holding each at least parallel to the other, if not viewed as the same entity. Rust finds postmodernism's liberating influences transcend not only combined time and history, but combined space and geography as well. It is space and not time that becomes important in postmodern mapping discourse.

Rust entreats comparative educators to relocate into this space, to extract from modernity the metanarratives to be dismantled, metanarratives containing the multiple small narratives previously hidden in the invisible space of society. The small narratives that Rust would have us draw our attention to can be the focus of mapping efforts in contemporary social science.

Suggesting as does Rust that the search for "the silent blueprint to life means looking in areas of darkness," Star (1991, 266) focuses our attention on these small and previously hidden narratives, on making the invisible visible. The comparative study of social narratives is developed similarly to that of the cartographer of land. We await the erosions and eruptions of the social masses for the opportunity to map changes, to analyze and interpret events. We take the event and make it consumable, a commodity for our readers, by filtering, fragmenting, and re-elaborating it "by a whole series of industrial procedures...into a finished product, into the material of finished and combined signs" (Baudrillard, 1990, 92).

Mapping social space is an effective method for addressing Rust's thoughtful arguments calling for a postmodernist application to strengthen emerging representations of reality. There is, however, much we must learn and understand to become effective mappers. This requires an association with a field experienced in

representing real space on a map. For this reason we introduce in our invitation to a postmodern reflection two cartographers who have observed in their field the same concerns and needs addressed by Rust.

A leading advocate of the postmodern enterprise in geography/cartography, J. B. Harley, advocates that cartographers both in academia and in the field must consider postmodernity's potential for revitalizing their cartographic efforts. Harley (1989) contends that the premise of cartography has long been that map makers must create knowledge limited by scientific or objective standards. Earlier than Harley, however, Robert McNee (1981, 12) observed that the cartographic process continuation in the positivist tradition could be attributed to the mapper's attraction to the label and role of being an objective scientist. From the time of McNee's observation in 1981, to Harley's much discussed call for a postmodern cartography nearly a decade later, we see the field continued to suffer through a long period of positivist grounding. However, McNee and Harley differ on the reasons for this.

McNee argues that during the long history of cartography, this tenacious holding to the positivist ideal of the objective scientist resulted in the continued construction of textual metanarratives, both in the maps and in the semiotic representations used by the mapper. Harley, however, considers a more potent influence, arguing that after the last

three decades, when much of academia moved toward or into the postmodern enterprise, cartographers adhered to a modernist application of knowledge, not only out of a concern for their reputations as objective scientists, but because of the influence ancient power structures had on the creation of maps. Harley states the power structures must give way to new ideas that should now be applied in a critical cartography, a cartography permitting the interpretation of the map as well as opening the map to the intent of those who use the map and those who create the map.

Harley (1989) makes an important distinction between the external power and the internal powers regulating the creation and reading of an ancient map. External power controlled what went into the map. It emanated from patrons, monarchs, and state institutions. Internal power was "embedded in the map text." This power was determined by the inclusions and exclusions of information written into the map at the will of the external power. Internal power limited all readers of the map to only the knowledge included in the map. The reader had no awareness of the excluded knowledge. These maps were akin to the modernist objects that Baudrillard suggests "can be historically and structurally defined as the exaltation of signs based on the denial of the reality of things" (1990, 63).

Figure 1 shows the top-down-power-influences controlling what little knowledge the reader could gather from a modernist

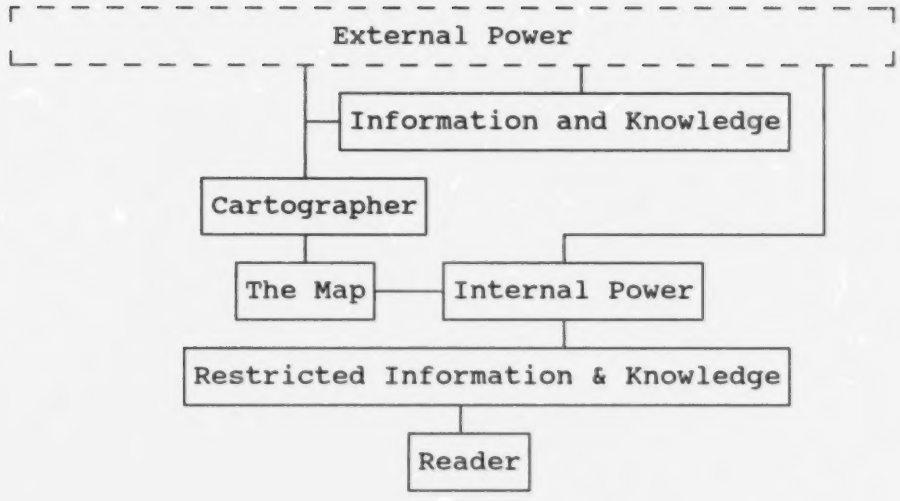

Figure 1. A heuristic map illustrating Harley's description of foundational constraints on the reader's access to knowledge mapped in the postivist' tradition.

map. These top-down influences are the external power imposed on the cartographer and the internal power restricting the reader's access to knowledge. The external powers make this modernist map an object Baudrillard describes as "bogus to the extent that it presents itself as authentic in a system whose rationale is not at all authenticity, but the calculated relations and abstractions of the sign" (1990, 35-36).

Note that in Figure 1 there are no "markedly different proposals also seeking to improve the rigor and relevance of research in education [or cartography] by encouraging tolerance, reflection, and the utility of multiple approaches in knowledge production and use" (Paulston, 1990, 396). Foucault offered a similar criticism of the modernist social science, finding it to be a contemplation of space and time that treated space as "the dead, the fixed, the undialetical, the immobile" while time was "richness, fecundity, life, dialectic" (Foucault in Harley, 1989, 4). This perspective of positivist space Foucault describes is also represented in the style of the cognitive map presented in Figure 1 where space is restricted because it is controlled; it is deliberately made dead, fixed, undialetical, and immobile.

Concerned as are Rust and Harley with overcoming the problems of modernism's positivist treatment of space is cartographer Edward Soja. Soja contends that in the past "space more than time, geography more than history, [hid] consequences from us" (1989, 71). Arguing as we do for the

use of space, Soja advocates making space and geography the primary focus and framework for the study of social phenomenon; the questions asked and the answers reported should first be concerned with situating the whereness of events.

Soja recounts that during the century of modernism the spatial was illusive, "blurring our capacity to envision the social dynamics of spatialization" (1989, 122). The blurring now must be made clear, particularly where multiple mininarratives are revealed to occupy space both geographical and ideological when only a metanarrative served before. Advocating space as the primary starting point for research diminishes the importance of time and creates the opportunity for researchers to apply to their craft the critical cartography advocated by Soja.

Space in the postmodern is the domain for the study of multiple social ideologies and convictions. It is the application, allocation, or appropriation of space within the social milieu that concern both the postmodern comparative researcher and the cartographer. The possibilities for a more inclusive mapping of the spatial in the social milieu motivate our creating critical cognitive maps.

Recall how Figure 1 shows the relationship of External Power to the creating and reading of knowledge from the map text, and consider whether this diagram represents a construction appropriate to Val Rust's argument for "the

critical task of disassembling these narratives [while increasing] our attention to small narratives" (Rust, 625-26). Clearly, Figure 1 is not an appropriate model for Rust's argument. Rather, this figure authenticates Charles Hampden-Turner's comment that the "visual-spatial imagery of the human is a style of representation largely missing from the dominant schools of psychology and philosophy, [so] there can be no pretence of impartially cataloguing the status quo. The image-breakers are still in charge" (1981, 8). Our purpose is to break the image-breakers, to encourage comparative analysts to become image-makers and, in doing so, to include the visual-spatial imagery of the human in their discourse.

Rust's and Harley's challenges to their fields of comparative education and cartography encourage these potentials for affective change; they encourage a global vision reflecting the spatial as advocated by Soja. We suggest that the prospect of a critical cartography offers possibilities for a comparative education examining educational problems "in the light of culturally determined needs, objectives, and conditions" (Raivola, 1985, 372). What is this cognitive mapping we advocate? What is the benefit of cognitive mapping and critical cartography to the literature of comparative education?

Rationales for and Examples of Cognitive Mapping

A cognitive map is a unique object. Each map is initially the property of the individual creating it and

contains some part of that person's knowledge and understanding of the social system. As a mental construction of the physical world and ideologies, cognitive maps can be regarded as elements or components characterizing what Baudrillard's translators describe as "art and life" (Foss and Pefanis, 1990, 11). They note that Baudrillard finds art and life shape the system of objects, and believes a purely descriptive system "carve[s] out a truth" (13). While we find cognitive maps can shape the system of objects, we suggest that, rather than carve out a truth, they instead portray the mapper's perceptions of the social world, locating in it multiple and diverse intellectual communities.

What Baudrillard calls "the artistic enterprise" includes the cognitive map in the sense that the map is a descriptive system; mapping collects knowledge objects around a "point where forms connect themselves according to an internal rule of play" (Baudrillard, 1990, 11), revealing information about space by showing that information scaled within another space. Mapping the elements of comparison models will contribute to our comprehension of the social and provide a basis for new research and for new maps resulting from the knowledge generated by research. Cognitive maps have the potential for representing the total area of large space on a smaller space, so that nothing has to be omitted.

An example of this type of cognitive map is Paulston's macro mapping of paradigms and theories located in comparative

eduction texts. (Paulston, 1992, 31) Shown in Figure 2, this map embodies Soja's concern for "a social ontology in which space matters from the very beginning" (Soja, 7). It is a study of society establishing "a primal material framework [of] the real substratum of social life" (Soja, 119) This heuristic map illustrates domains, represents a field of ideas, and opens space to all propositions in the social milieu. What appears as open space within the global representation is space that can be claimed by intellectual communities that are not yet represented by the labels now included on the map. It is conceivable that the part of the world Paulston draws our attention to does look like this, but it is Paulston's perception of the world derived from textual exegesis and not what Baudrillard would consider, we are sure, a map carving out the truth. If not truth, but only one possible rational way of seeing the world, how should or can it be considered as a irrelevant contribution by those who are not Paulston?

Creating on the spatial surface of paper the image of "a primal material framework [of] the real substratum of social life" (Soja, 119) addresses Rust's urging to focus on mininarratives rather than metanarratives. Paulston's situating of paradigms and theories on the spatial surface of paper grants to those paradigms and theories the mapper's recognition of their space in the real world. We can question whether the depiction is accurate, whether the allocation of

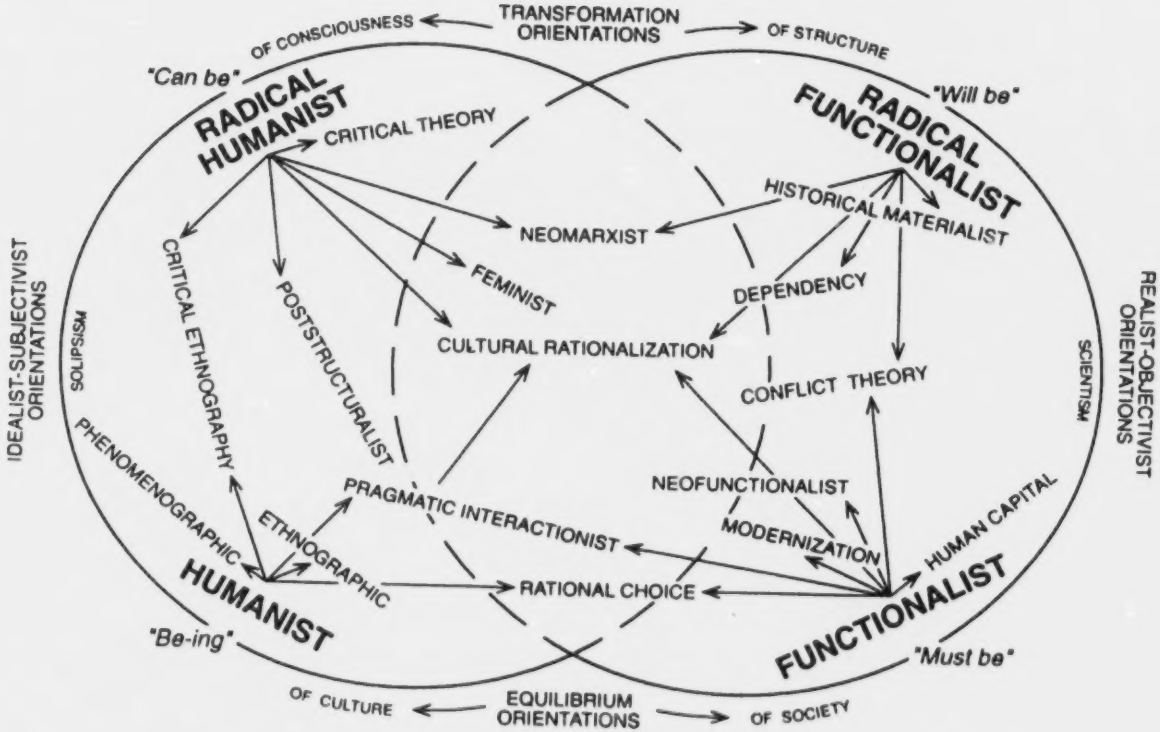

Figure 2. A macro mapping of paradigms and theories in comparative and international education seen as an intellectual field. Source: Paulston, 1992.

BEST COPY AVAILABLE

space is appropriate, and whether the relationships have developed or are developing in the directions Paulston indicates. If we have answers to these questions the map is available for dialogue; if we disagree, we need only redefine the space. Paulston's map is a "holistic, context dependent, and integrative" treating of paradigmatic knowledge not as "isolated facts, but as integrated wholes" (Masemann, 1990, 465). Thus knowledge is no longer positivist data but "integrated forms of culture" (469). Spatial mapping of paradigms and theories also moves comparative education away from a modernist "system for classifying societal data" (Holmes, 1984, 591), away from structuring knowledge as illustrated in Figure 1.

Paulston's map in Figure 2 does not conform to the foundational model for modernist maps shown in Figure 1. There are no powers in Figure 2 controlling the disbursement of knowledge. Instead, the map develops as proposed in Figures 3 and 4, where the power to read the world is so equally shared that power is not even a category on the developmental map. Figure 3 represents a small field of the global representation in Figure 4. Figure 3 shows a linear progression of spatial cycles through time but not controlled by time. Each cycle begins with the Social Milieu, followed by a Reader/Mapper creating a Map. The Reader is a person who observes the social milieu. The Mapper is a person who creates a map reporting his or another person's observations.

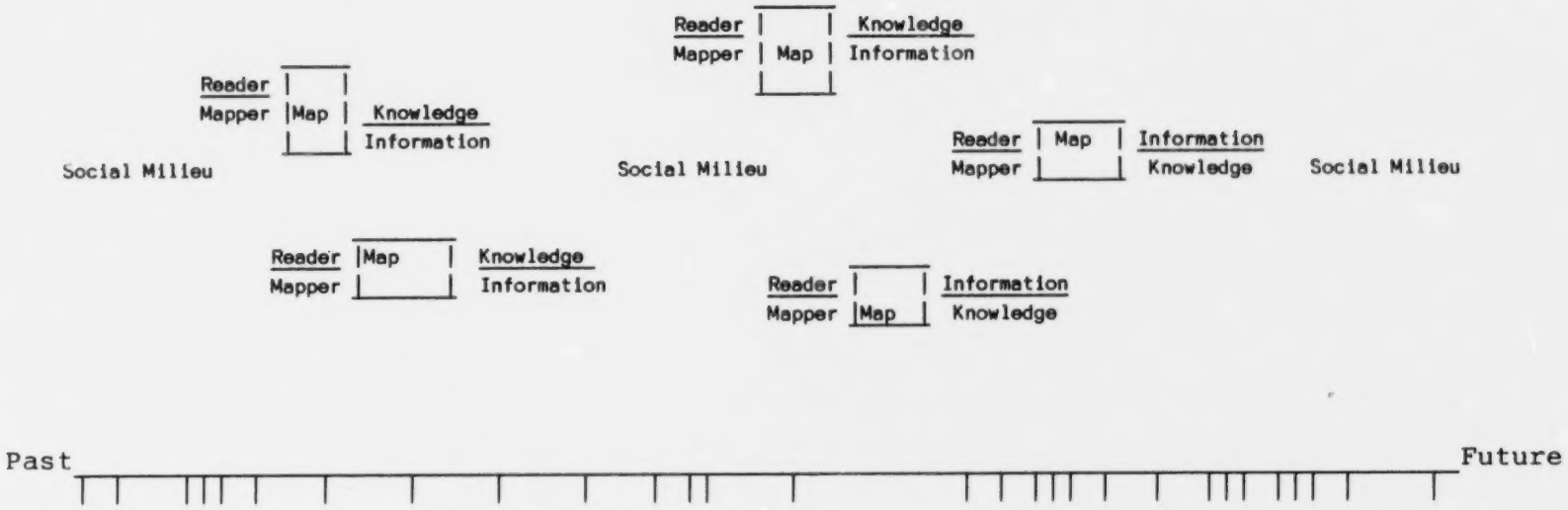

Figure 3. A constructivist map illustrating the free access to knowledge and the absence of a power base in the Postmodern map.

The Map provides new Knowledge/Information to be incorporated into the Social Milieu. That Knowledge/Information most likely changes the Social Milieu, creating new social spaces that Readers observe and Mappers again address.

The space represented in this map is much different from that in Figure 1, where space was controlled and limited by the external power and knowledge was controlled and limited by the internal power of the map. In Figure 3 the only limitations are those of the Map surfaces, the square or rectangular, vertical or horizontal screens or paper surfaces used by the Mapper to outline social space in miniature. The absence of lines connecting the linear progression permits an infinite number of mappers and maps--unlimited perspectives of the Social Milieu, all contributing to the Knowledge/ Information of how space is used.

The continuous horizontal line with descending vertical lines across the bottom of Figure 3 is a time line. This time line is a definite break from the modernist representations of time previously dividing space into equal units. Each interval between any two vertical lines represents a unit of time, so the narrowest space and the widest space each represent one unit--days, years, etc. However, the erratic spacing makes this time line distinctly the product of a postmodern mapping effort. We suggest that wider spaces indicate greater activity or change in the social milieu, more social erosions and eruptions. The more narrow spaces, the

Figure 4. A critical pragmatic map providing a global view of the cognitive map in Figure 3.

closer sets of vertical lines, indicate little social change in the given period. Further, we anticipate no agreement concerning either Reader's or Mapper's about the appropriate interval of space to indicate change. These perceptions are as unique as the individual's social space and the cognitive maps created to illustrate that space.

Figures 3 is incomplete since we could indicate mapping occurring in the spaces above and below the Knowledge/Information as well as the Social Milieu entries. Figure 4 reflects the potential for global mapping where the diversity of ideologies and convictions is demonstrated in the numerous fonts. Mapping occurs at various locations in this space through the process shown in Figure 3. The new Knowledge/Information changes in some way the ideology or convictions of a component of the Social Milieu.

Figures 3 and 4 confirm there is a continuity of space as well as time as Star (277) suggests, but neither time nor space is dependent on the other. Time certainly is continuous and experienced; while it is biologically limited it is socially flowing or rupturing. Space, however, is conditional, subject to be in a time (but not to be time) as well as given to a social context. Social space also is subject to change, just as the space of the land is conditional to natural erosions and eruptions. A calm sea or a dormant volcano slows geological time, leaving little trace of time's passing. A violent sea or an erupting volcano

quickens the geological pace creating change for the cartographer to map. So it is with the measure of society. The more violent or overflowing the society the more changes readers and mappers may perceive. However, social mappers need not await the abatement of the societal seas or the cooling of the societal land to begin their project. They may map immediately as the erosions and eruptions affect the social milieu. The potential for comparative immediacies and simultaneities inspires continual mapping and remapping.

Conclusion

Rust has further opened comparative education to its postmodern potential, observing "ours is a world, no longer of reality, but of simulation, where it is no longer possible to separate the real from the image" (Rust, 622). Now cognitive maps offer comparative education a tool for expanding conceptual presentations and interpretations. In the hands of the comparative educator cognitive maps should be a part of research directed, as Sack suggests, "at reconstructing... chains of influence so that we will know what parts of the society are interrelated" (1980, 16-17). Figures 3 and 4 provide a model for study and interpretation of that chain of influence, linking the components of the social milieu to social mappers and the social map. Creating knowledge of the interrelations and locations in the milieu of diverse societies and cultures, and then locating them in relation to

one another, is the essence of a critical cartography and the essence of comparative education.

We propose, first, that the structures of multiple education and knowledge systems can be recreated in one or more maps, images of space reflecting the effect of passing time on that space; and, second, that comparative education researchers attempt more often to represent that space and time through the creation of cognitive maps.

Our rationale for this proposal is that the map provides the mapper access to understanding, but gives all persons the opportunity to enter a dialogue to show where they are in society. The cognitive map reveals the known and perceived social inclusions while leaving space for further inclusions of social ideas. Whether the map is considered by the reader as a metaphorical curiosity or accepted as a literal representation, it offers comparative researchers an opportunity to situate optimistically the world of ideas in a postmodern panorama, disallowing the promotion of an orthodoxy.

References

Baudrillard, J. (1990). Revenge of the crystal. London: Pluto Press.

Downs, R. M. & Stea, D. (1973). Cognitive maps and spatial behavior: process and products. In R. M. Downs & D. Stea (Eds.), Image and environment: Cognitive mapping and spatial behavior. Chicago: Aldine Publishing Company.

Foss, F. & Pefanis, J. (1990). Translators' note. In F. Foss & J. Pefanis (Eds. and Trans.) Revenge of the Crystal. London: Pluto Press.

Hampden-Turner, C. (1981). Maps of the Mind. New York: Collier Books.

Holmes, B. (1984). "Paradigm Shifts in Comparative Education. Comparative Education Review, 28, 586-604.

Harley, J. B. (1988). Maps, Knowledge, and Power. The iconography of landscape. London: Cambridge University Press.

_____ (1989). Deconstructing the Map. Cartographica, 26, 1-20.

McNee, R. B. (1981) Perspective--Use It or Lose It. Professional Geographer, 33, 12-15.

Marton, F. (1988). Phenomenography: Exploring different conceptions of reality. In D. M. Fetterman (Ed.), Qualitative approaches to education. New York: Praeger.

Masemann, V. (1990). Ways of knowing: Implications for comparative education. Comparative Education Review, 34,

465-473.

Paulston, R. (1990). From paradigm wars to disputatious community. Comparative Education Review, 34, 395-400.

Paulston, R. (1992, September). A cognitive mapping of vision and division in comparative education texts. Paper presented at the 24th Annual Conference of the International Visual Literacy Association, Pittsburgh, PA.

Raivola, R. (1985). What is comparison? Methodological and philosophical considerations. Comparative Education Review, 29, 362-374.

Rust, V. (1990). "Postmodernism and Its Comparative Education Implications," Comparative Education Review, 35, 610-626.

Sack, R. D. (1980). Conceptions of space in social thought. Minneapolis: University of Minnesota Press.

Soja, E. (1989). Postmodern geographies: The reassertion of space in critical social theory. London: Verso.

Star, S. L. (1991). The sociology of the invisible: The primacy of work in the writings of Anselm Strauss. In D. R. Maines (Ed.), Social Organization and Social Process: Essays in Honor of Anselm Strauss. New York: Aldine de Gruyter.